

COMPOSITION AND METHOD FOR POLISHING MEMORY HARD DISKS
EXHIBITING REDUCED EDGE ROLL-OFF

ABSTRACT OF THE DISCLOSURE

The invention provides a chemical-mechanical polishing composition containing (a) an abrasive selected from wet-process silica, alpha alumina, fumed alumina, ceria, zirconia, titania, and combinations thereof, (b) an oxidation catalyst, (c) a non-transition metal sulfate salt, (d) a complexing agent, (e) hydrogen peroxide, (f) a nonionic surfactant, (g) an anionic surfactant, and (h) water. The polishing composition has a pH of about 1 to about 5, and the polishing composition is substantially free of a peroxydisulfate salt. The invention also provides a method of chemically-mechanically polishing a substrate, especially a nickel-phosphorous substrate, by contacting a substrate with a polishing pad and the chemical-mechanical polishing composition, moving the polishing pad and the polishing composition relative to the substrate, and abrading at least a portion of the substrate to polish the substrate.

FIG. 1